



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,568	10/17/2003	Dac-Kwang Jung	5000-1-474	2490

33942 7590 11/01/2006

CHA & REITER, LLC
210 ROUTE 4 EAST STE 103
PARAMUS, NJ 07652

EXAMINER

SEDIGHIAN, REZA

ART UNIT	PAPER NUMBER
----------	--------------

2613

DATE MAILED: 11/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/688,568

Applicant(s)

JUNG ET AL.

Examiner

M. R. Sedighian

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6 is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2-5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

Art Unit: 2613

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Healey et al. (US Patent Application Publication No: 2003/0007207 A1) in view of Kim et al. (US Patent Application Publication No: 2002/0159688 A1), or Gaebe (US Patent Application Publication No: 2001/0030810 A1).

Regarding claim 1, Healey teaches a Wavelength Division Multiplexing (WDM) light source apparatus (fig. 1), comprising: N SOAs (13, fig. 1) each having one end coated with a substance having a first reflection factor and the other end coated with a substance having a second reflection factor (page 2, paragraph 0034), the first reflection factor being higher than the second reflection factor (page 2, paragraph 0034), the N SOAs (13, fig. 1) modulating respective input signals (14, fig. 1) into optical signals according to a high speed data signal to be transmitted and amplifying the modulated signal (page 3, paragraph 0035, lines 9-17); a 1xN multiplexer/demultiplexer (9, fig. 1) having one end composed of N terminals (the N terminals of arrayed waveguide grating 9) and the other end composed of one terminal (the output terminal that is connected to fiber 3), the N terminal coupled with the N SOAs (13, fig. 1). Healy differs from the claimed invention in that Healy does not disclose a reflective mirror connected to the one terminal of the 1xN multiplexer/demultiplexer for reflecting a first portion of a signal received from the 1xN multiplexer/demultiplexer. However, it is well known to incorporate a mirror along the line of an optical transmission system to provide selective reflection of optical

Art Unit: 2613

signal to redirect the light signal. For example, Kim teaches a 1xN Mux (2, fig. 6) that is connected to a reflective mirror (12, fig. 6 and page 2, paragraph 0028). Likewise, Gaebe teaches an optical multiplexer (515, fig. 5) and a reflective mirror (525, fig. 5 and page 4, claim 18). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention to incorporate a reflective mirror, as it is taught by Kim or Gaebe, at the output of multiplexer/demultiplexer 9 of Healy to selectively reflect and redirect the signal light.

3. Claims 2-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. Claim 6 is allowed over prior art of record.


5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. R. Sedighian whose telephone number is (571) 272-3034.

The examiner can normally be reached on M-F (from 9 AM to 5 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2613

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


M. R. SEDIGHIAN
PRIMARY EXAMINER